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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,745

09/22/2006

Yuji Sakamoto

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23973 7590 09/16/2008

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EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,745	Applicant(s) SAKAMOTO ET AL.	
	Examiner DEVONA E. FAULK	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/22/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The preliminary amendment filed 9/22/06 was received and entered. Claim 3 was cancelled.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 7 is directed to a program. A program is non-statutory subject matter.(See MPEP §2106-§2106.02).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda (JP 2001-025085) in view of Egatani (JP 2003-259500).

Regarding claim 1, Maeda discloses an audio output apparatus (Figures 1 and 2) having:

at least one first speaker changeably installed in a predetermined position and outputting an audio signal (22a, Figure 1, ¶ 0022 under Detailed Description); and

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a plurality of second speakers fixedly installed in positions different from the position of the first speaker and different from each other, and outputting audio signals (22b-22e, Figure 1, ¶ 0022 under Detailed Description),

the apparatus generating a sound field according to position relations among the install position of the first speaker and the install positions of the plurality of second speakers when the position of the user is used as a reference (Figure 1; ¶ 0017, ¶ 0018 under Detailed Description), wherein the apparatus comprises:

a plurality of audio signal detecting devices provided in or near the install positions of the second speakers which detect audio signals output from the first speaker (microphones 34-36; ¶ 0025 under Detailed Description);

a speaker position calculating device which obtains the audio signals detected by the audio signal detecting device, detecting that the install position of the first speaker has been changed on the basis of the obtained audio signals, and calculating the changed install position (direction determining circuit , 48, Figure 2; Figure 2 is the internal configuration of the remote control 33 of Figure 1; ¶ 0028, ¶ 0029 under Detailed Description) ; and

an audio signal output adjusting means device., on the basis of the position of the first speaker and the install positions of the plurality of second speakers, that changes allocation of output of the audio signals to the plurality of second speakers, and adjusts output of the audio signal from at least one of the first speaker and the plurality of second speakers so that a sound field according to the position relations before the install position of the first speaker was changed is maintained (channel selection circuit

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31; Figure 1; . ¶ 0028, ¶ 0029 under Detailed Description

Maeda discloses a speaker position calculating device that detects and positions of the speakers and a device that adjusts the allocation of output based on the position of the speakers. Maeda fails to explicitly teach of calculating a changed install position of the first speaker and changing allocation of the output of the audio signals based on the changed install position of a first speaker and the other speakers.

Egatani discloses calculating a change install position of a first speaker and adjusting the audio output based on the changed install position of a first speaker and the install positions of the other speakers (speaker 7-1 reads on the install speaker; see ¶ 0011 - ¶ 0021 under Detailed Description).

It would have been obvious to modify Maeda so that the calculating device calculates a changed install position of a first speaker and so that the adjusting devices changes allocation of the output audio signals on the basis of the changed installed position of a first speaker and the install position of the other speakers for the benefit of providing a better surround sound for the user.

All elements of claims 2 and 4 are comprehended by the rejection of claim 1 (See Maeda and Egatani as applied above to claim 1).

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Regarding claim 5, Maeda discloses an audio output apparatus (Figures 1 and 2)

having:

at least one first speaker changeably installed in a predetermined position and outputting an audio signal (22a, Figure 1, ¶ 0022 under Detailed Description); and a plurality of second speakers fixedly installed in positions different from the position of the first speaker and different from each other, and outputting audio signals (22b-22e, Figure 1, ¶ 0022 under Detailed Description);

a plurality of audio signal detecting devices provided in or near the install positions of the second speakers which detect audio signals output from the first speaker (microphones 34-36; ¶ 0025 under Detailed Description);

wherein on the basis of the install position of the first speaker and the install positions of the plurality of second speakers, allocation of output of the audio signals to the plurality of second speakers is changed and output of the audio signal from at least one of the first speakers and the plurality of second speakers is adjusted so that a sound field according to the position relations among the install position of the first speaker and the install positions of the second speakers when the position of the user is used as a reference is maintained (direction determining circuit , 48, Figure 2; Figure 2 is the internal configuration of the remote control 33 of Figure 1; ¶ 0028, ¶ 0029 under Detailed Description) .

Maeda discloses a speaker position calculating device that detects and positions of the speakers and a device that adjusts the allocation of output based on the position of the speakers. Maeda fails to explicitly teach of calculating a changed install position of the

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first speaker and changing allocation of the output of the audio signals based on the changed install position of a first speaker and the other speakers.

Egatani discloses calculating a change install position of a first speaker and adjusting the audio output based on the changed install position of a first speaker and the install positions of the other speakers (speaker 7-1 reads on the install speaker; see ¶ 0011 - ¶ 0021 under Detailed Description).

It would have been obvious to modify Maeda so that the calculating device calculates a changed install position of a first speaker and so that the adjusting devices changes allocation of the output audio signals on the basis of the changed installed position of a first speaker and the install position of the other speakers for the benefit of providing a better surround sound for the user.

Claim 6 has the same features as claimed 5. Claim 6 is the method claim to claim 5 (the method is implicit to the functionality of the system of claim 5).

All elements of claim 7 are comprehended by Maeda and Egatani as applied above to the rejection of claim 1 (Maeda teaches that the adjusting is executed by a computer; microcomputer 37; see Egatani; ¶ 0023 - ¶ 0033 under Detailed Description)

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Regarding claim 8, Maeda as modified discloses a program that is executed by a computer. Maeda as modified fails to explicitly disclose that the program is recorded on a recording medium. The examiner takes official notice that recording programs on recording mediums is well known in the art. It would have been obvious to modify Maeda as modified by having the program recorded on a recording medium so that data can be stored and quickly accessed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/
Examiner, Art Unit 2615